IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|			
Inventors:	Eugene A. Woltering *et al.*	Group:	1651
Serial No.:	09/866,296	Examiner:	Afremova, Vera
Filing Date:	May 25, 2001		
Title:	Three-dimensional Ex Vivo Angiogenesis System		
File No.:	Woltering 98M06.1		

CERTIFICATE OF FIRST CLASS MAILING

I hereby certify that the listed enclosures are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 21, 2004.

- Reply Under 37 C.F.R. § 1.111

- Declaration of Eugene A. Woltering

- Fee Transmittal Sheet

- Check for $110.00

- Return postcard verifying receipt of the listed enclosures
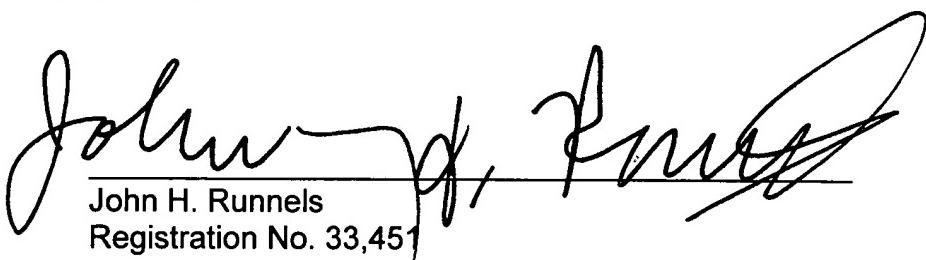
John H. Runnels
Registration No. 33,451

April 21, 2004
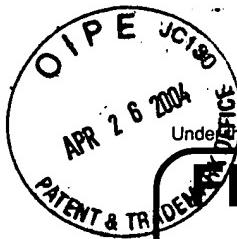
PTO/SB/17 (10-03)
Approved for use through 07/31/2006. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL
for FY 2004
Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

Complete if Known	
Application Number	09/866,296
Filing Date	May 25, 2001
First Named Inventor	Eugene A. Woltering
Examiner Name	Afremova, Vera
Art Unit	1651
Attorney Docket No.	98M06.1 Woltering

TOTAL AMOUNT OF PAYMENT	($)	$110.00

METHOD OF PAYMENT *(check all that apply)*

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number	20-0096
Deposit Account Name	Taylor Porter Brooks & Phillips

The Director is authorized to: *(check all that apply)*

☒ Charge fee(s) indicated below   ☒ Credit any overpayments

☒ Charge any additonal fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, **except for the filing fee**
to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee ($)	Fee Code	Fee ($)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1)   ($)

2. EXTRA CLAIM FEES FOR UTILITY AND

	Extra Claims		Fee from below	Fee Paid
Total Claims		-20** =	0 X	= 0.00
Independent Claims		- 3** =	0 X	= 0.00
Multiple Dependent				=

Large Entity		Small Entity		Fee Description
Fee Code	Fee ($)	Fee Code	Fee ($)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)   ($) $0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee ($)	Fee Code	Fee ($)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non - English specification	
1812	2,520	1812	2,520	For filing a request for *ex parte* reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	110.00
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR § 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Statement	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)   ($) $110.00

SUBMITTED BY		Complete *(if applicable)*	
Name (Print/Type)	John H. Runnels	Registration No. (Attorney/Agent) 34,431	Telephone (225) 387-3221
Signature		Date	April 21, 2004

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of	Group 1651
Eugene A. Woltering *et al.*	Examiner Afremova, Vera
Serial No. 09/866,296	
Filing Date May 25, 2001	
For: Three-Dimensional *Ex Vivo* Angiogenesis System (File No. 98M06.1 Woltering)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY UNDER 37 C.F.R. § 1.111

Dear Sir:

This Reply is submitted in response to the Official Action dated January 13, 2004.

No further amendments are presented. Claims 1-10, 13, 38, and 39 remain pending in the application.

CERTIFICATE

I hereby certify that this Reply under 37 C.F.R. § 1.111 and the accompanying check for $110.00 are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 21, 2004.
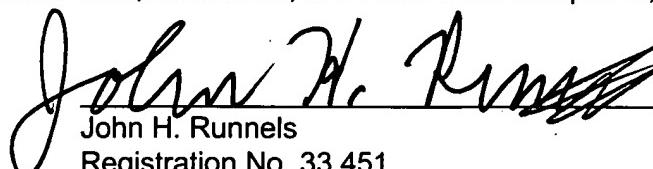
John H. Runnels
Registration No. 33,451
April 21, 2004

Enclosed is a check for $110 for a one-month extension of time, to extend the time for response from April 13, 2004 to May 13, 2004. (37 C.F.R. § 1.136(a)(3)). If this amount is incorrect, please refer to the Deposit Account Authorization previously filed for this application. If any additional extension of time is required, please consider this paper a petition for the total extension of time required.

The January 13, 2004 Office Action had the effect of withdrawing all prior grounds of rejection and objection, and of entering two new grounds of rejection.

Reexamination and reconsideration of the application are respectfully requested.

The § 112, First Paragraph Rejection

Claims 1-5, 7, 8, 10, 13, 38, and 39 were rejected on the ground that the specification "does not reasonably provide enablement for enabling for method of assaying angiogenic potential of a three-dimensional tumor embedded in collagen-containing matrix." (January 13, 2004 Office Action, p. 3)

As paragraphs 2-6 of the enclosed Declaration of inventor Dr. Eugene Woltering demonstrate, the method has been successfully demonstrated in a collagen-containing matrix, namely, one based on ECM gel. The experiments described in Dr. Woltering's Declaration were conducted in essentially the same manner as those reported in the original specification, except as noted, particularly the substitution of a collagen-containing system for the fibrin/thrombin clot system. Obtaining successful results with the collagen-based system was straightforward; undue experimentation was not required.

As Dr. Woltering's Declaration notes (Paragraphs 5, 6), the collagen-based system was less efficient than the fibrin/thrombin clot system. But more important is the fact that the collagen-based system did work, as the specification had correctly predicted.

2

It is respectfully submitted that the enablement ground of rejection should be withdrawn.

The §§ 102 and 103 Rejections

Claims 1-6, 9, 13, 38, and 39 were rejected under 35 U.S.C. §§ 102(a) and 103 as being anticipated by, or obvious over, the Gulec *et al.* paper, either taken alone or in combination with a secondary reference.

As paragraphs 7-10 of the enclosed Declaration of inventor Dr. Eugene Woltering demonstrate, the Gulec *et al.* paper represents a publication of the inventors' own work. Because the paper was published in May 2001, less than one year before the nearly-contemporaneous May 2001 filing date of the present application, the Gulec *et al.* paper has been removed as a reference.

Applicants also note that the Gulec *et al.* paper was published after the May 2000 provisional filing date whose priority has been claimed under 35 U.S.C. § 119(e). While the provisional priority claim provides an additional basis to remove the Gulec *et al.* paper as a reference, it is not necessary to examine the disclosure of the priority application in detail to resolve this question. Even if one disregarded the effect of the priority application, the paper would still represent a publication of the Applicants' own work made less than one year prior to the filing date of the present application.

It is respectfully submitted that the Gulec *et al.* paper has been removed as a reference, that all prior art rejections have thereby been overcome, and that all §§ 102 and 103 rejections should therefore be withdrawn.

3

Conclusion

Allowance of Claims 1-10,13, 38, and 39 at an early date is respectfully requested.

Respectfully submitted,
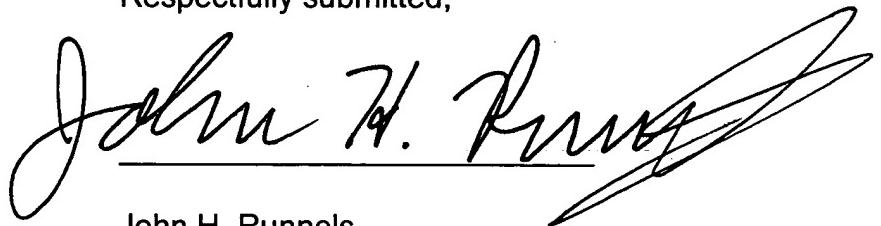
John H. Runnels
Taylor, Porter, Brooks & Phillips, L.L.P.
P.O. Box 2471
Baton Rouge, LA 70821
Registration No. 33,451
Telephone (225) 381-0257
April 21, 2004